CLAIMS

WHAT IS CLAIMED IS:

1. A stator for a dynamo-electric machine comprising:

a stator core having a plurality of slots, and a stator winding installed in said slots and comprising a plurality of conductors joint end portions thereof joined to each other; wherein,

joint portions of said joint end portions comprise a molten metal of a lower melting point than that of said conductors.

2. A stator for a dynamo-electric machine according to Claim 1 wherein:

said molten metal is an alloy of a material of said conductors and an additive metal.

3. A stator for a dynamo-electric machine according to Claim 2 wherein:

said additive metal is a Cu-P alloy.

4. A stator for a dynamo-electric machine according to Claim 2 wherein:

said additive metal is Ag or an Ag alloy.

5. A stator for a dynamo-electric machine according to Claim 2 wherein:

said additive metal is Sn or an Sn alloy.

6. A method for manufacturing a stator for a dynamo-electric machine comprising,

in a stator comprising a stator core having a plurality of slots, and a

stator winding installed in said slots and comprising a plurality of conductors joint end portions thereof joined to each other,

an insert metal positioning process for placing an insert metal of a lower melting point than that of said conductors between said joint end portions of said conductors, and

after heating a vicinity of said joint end portions to a temperature at which said insert metal melts and said joint end portions do not melt and said insert metal is melted, a joining process for solidifying said insert metal and joining said joint end portions by ending said heating.

7. A method for manufacturing a stator for a dynamo-electric machine comprising,

in a stator comprising a stator core having a plurality of slots, and a stator winding installed in said slots and comprising a plurality of conductors joint end portions thereof joined to each other,

an insert metal positioning process for placing an insert metal of a lower melting point than that of said conductors between said joint end portions of said conductors, and

after heating a vicinity of said joint end portions to a temperature at which said insert metal melts and melt alloying conductor end portions and said insert metal, a joining process for solidifying said molten alloy and joining said joint end portions by ending said heating.

8. A method for manufacturing a stator for a dynamo-electric machine according to Claim 6 wherein:

pairs of said joint end portions to be joined align in a row of two (2) or more sets in a radial direction, and said insert metal is not provided between adjacent sets of said joint end portions.

9. A method for manufacturing a stator for a dynamo-electric machine

according to Claim 6 wherein:

pairs of said joint end portions to be joined align in a row of a plurality of sets in a circumferential direction, and said insert metal provided between each said joint end portion is connected in a circumferential direction.

10. A method for manufacturing a stator for a dynamo-electric machine according to Claim 9 wherein:

a cross sectional area of a connecting portion of said insert metal is smaller than a cross sectional area of a portion between said joint end portions.

11. A method for manufacturing a stator for a dynamo-electric machine according to Claim 6 wherein:

said vicinity of said joint end portions is heated with a non-contact heat source in said joining process.

12. A method for manufacturing a stator for a dynamo-electric machine according to Claim 9 wherein:

said joining process is resistance heating in which an electrode is contacted to said joint end portions and a current is conducted, two (2) or more sets of said joint end portions aligned in a radial direction being sandwiched together by two (2) electrodes disposed at an inner diameter side and an outer diameter side and heated.

13. A method for manufacturing a stator for a dynamo-electric machine according to Claim 12 wherein:

said two (2) electrodes disposed at an inner diameter side and an outer diameter side are each of a roller shape and heat, while rolling, an inner side and outer side of joint end portion groups aligned in a row of a

plurality of sets in a circumferential direction.